

# FRESNO, CALIFORNIA

## CLASS SPECIFICATION

### SENIOR LABORATORY SPECIALIST

#### **FLSA STATUS:**

Non-Exempt

#### **CLASS SUMMARY:**

The Senior Laboratory Specialist is the fourth level in a four level Utilities Laboratory series. Incumbents are responsible for providing lead direction to other laboratory personnel and performing and/or oversees the performance of sophisticated analysis of environmental samples, including but not limited to water, groundwater, wastewater, raw and digested sludge, biosolids and soils in accordance to prescribed methods. Incumbents may be assigned to the general, organic, inorganic or microbiological laboratories within the laboratory.

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The Senior Laboratory Specialist is distinguished from the Laboratory Analyst by its responsibility for performing advanced environmental analyses es and providing lead direction to other laboratory personnel.

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**TYPICAL CLASS ESSENTIAL DUTIES:** (These duties are a representative sample; position assignments may vary.)

#### **FRE- QUENCY**

1. Performs advanced analysis of environmental samples including but not limited to water, groundwater, wastewater, sludge, biosolids and soil samples using sophisticated laboratory instruments. The instruments include but on not limited to ion chromatographs (IC), inductively coupled plasma spectrophotometers (ICP), ICP-mass spectrophotometers (ICP-MS), gas chromatographs (GC), GC-mass spectrophotometers (GC-MS), liquid chromatographs (LC) and auto analyzers.
2. Assists in the development and maintenance of laboratory quality control and quality assurance programs, including the preparation and maintenance of associated charts, the preparation of samples for analysis, and the validation of data based on established quality control criteria.
3. Reviews a variety of reports received from external laboratories and enters data into the automated laboratory information management system, ensuring completeness of information and appropriateness of methodologies utilized.
4. Develops analytical methods, establishes detection limits and quality assurance criteria to conform with applicable regulatory agency requirements.
5. Monitors and maintains supply, reagent, and equipment inventory and requisitions replacement items.

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6.	<u>Oversees the training of laboratory staff.</u>	Occasion-ally 5%	Deleted: T
7.	Performs other duties of a similar nature or level.	As Required	Deleted: s
8.	<u>Serves as the leadworker to other employees with duties including but not limited to: monitoring laboratory workflow; prioritizing and assigning work and: approving and releasing analysis results.</u>	Daily 25%	Deleted: on the use of routine metal analyses utilizing ICP
9.	<u>Records and maintains a variety of laboratory data in applicable logs, forms, and or automated Laboratory Information Management Systems (LIMS) databases</u>	Daily 15%	Formatted Table
10.	<u>Perform a variety of administrative activities in support of laboratory operations which include reading and responding to a variety of inquiries and communications and participating in a review and updating of standard operating procedures.</u>	Weekly 10%	Formatted: Left
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**Training and Experience** (positions in this class typically require):

- Bachelor's Degree in Chemistry, Biochemistry, Biology or closely related field and at least two years of experience in the performance of complex chemical analysis using sophisticated laboratory instruments including but not limited to inductively coupled plasma atomic emission or mass spectroscopy, gas or liquid chromatograph/mass spectrometers, ion chromatograph instrumentation or at least two years experience equivalent to that of a Laboratory Analyst with the City of Fresno;
- OR
- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

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- Deleted: inorganic and/or organic
- Deleted: flame, graphite furnace, and/or vapor generation atomic absorption spectrometry, and/or
- Deleted: practical knowledge of microbiological analysis and procedures are required

**Licensing Requirements** (positions in this class typically require):

- Basic Class C License
- California Water Environment Association Grade II Laboratory Analyst Certification

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**Knowledge** (position requirements at entry):

Knowledge of:

- Automated laboratory information management systems;
- Quality control and quality assurance practices associated with a laboratory;
- Organic and inorganic chemistry principles;
- Biological techniques;
- Modern laboratory techniques and procedures as related to the analysis of environmental samples;
- Mathematical concepts;
- Recordkeeping principles and practices;
- Data collection and analysis techniques;
- Analytical methods and techniques;
- Approved methods for given sample types and analyte;
- Approved sample preparation methods for given sample type and analyte;
- maximum holding times for given sample types and analytes;
- Quality assurance principles and associated methods for measurement;
- Applicable computer software packages;
- Handling acids and other hazardous chemicals;
- Safe work practices and procedures.

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**Skills** (position requirements at entry):

Skill in:

- Training employees in proper work methods
- Analyzing a variety of samples in a laboratory setting
- Performing advanced analyses using sophisticated laboratory instrumentation
- Maintaining and operating laboratory equipment and apparatus.
- Gathering, analyzing, and evaluating evidence
- Preparing and performing mathematical calculations
- Safe handling of chemicals
- Preparing clear and accurate scientific reports, including graphic and statistical representations
- Monitoring and maintaining supply and material inventory
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, business, organizations, elected and appointed officials, media, etc. sufficient to exchange or convey information, give/receive work direction
- Safe laboratory practices.
- Applying researching methods

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**Physical Requirements:**

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, pulling and pushing.

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals, and oils.

**Note:**

The above job description is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

**Classification History:**

Draft prepared by Fox Lawson & Associates (LM)  
Date: 12/2007